

# LEAP

## (LEARNING EXPERIENCES AND ALTERNATIVE PROGRAMS FOR PRESCHOOLERS AND THEIR PARENTS)

### CHARACTERISTICS OVERVIEW CHART

Verbal Skills	Grade Levels	Cognitive Level	Areas Addressed
<input checked="" type="checkbox"/> Nonverbal	<input checked="" type="checkbox"/> PK	<input checked="" type="checkbox"/> Classic	<input checked="" type="checkbox"/> (Pre)Academic/Cognitive/Academic
<input checked="" type="checkbox"/> Mixed	<input type="checkbox"/> Elementary	<input checked="" type="checkbox"/> High	<input checked="" type="checkbox"/> Adaptive Behavior/Daily Living
<input checked="" type="checkbox"/> Verbal	<input type="checkbox"/> Middle/High	Functioning	<input checked="" type="checkbox"/> Behavior
			<input checked="" type="checkbox"/> Communication/Speech
			<input checked="" type="checkbox"/> Social/Emotional

### BRIEF INTRODUCTION

Developed by Strain (personal communication, 2008), the Learning Experiences and Alternative Program for Preschoolers and Their Parents (LEAP) is a comprehensive program supported by a strong body of literature. Using applied behavior analysis (ABA) interventions, the LEAP program provides education and support to preschool students with autism (AU) as well as parent instruction. LEAP has been conducted over an 18-year period (Hoyson, Jamieson, & Strain, 1984; Strain, 1987; Strain & Hoyson, 2000).

### DESCRIPTION

LEAP is a multi-faceted program for young children with autism that uses the following instructional components: peer-mediated instruction, incidental teaching, self-management training, prompting strategies, and systematic parent training (see these topics elsewhere in this guide). Research on these components implemented within the model consists of over 30 studies, all with positive outcomes. Specifically, it has been found that LEAP participants:

1. Show significant reductions in autistic symptoms after two years of intervention while comparison children not participating in LEAP do not;

2. Make marked developmental progress on intellectual and language measures, while comparison children not participating in LEAP do not;
3. Are far more socially engaged and appropriate; and
4. Maintain gains (through college age) with no signs of developmental regression (cf., Hoyson et al., 1984; Kohler & Strain, 1997; Sainato, Goldstein, & Strain, 1992; Strain, 1987, 2001, Strain & Hoyson, 2000).

In addition, adult family members whose children participated in LEAP were significantly less likely than comparison families to show signs of significant stress and depression following the early intervention experience (Cordisco & Strain, 1986; Strain, 1987).

## **SUMMARY**

LEAP is a comprehensive program that has significant long-term impact on individuals with autism. For example, a longitudinal study over 18 years showed sustained progress in individuals who participated in this training model. The LEAP model includes a strong ABA background and incorporates peer- and adult-mediated strategies.

## **RESEARCH TABLE**

<b>Number of Studies</b>	<b>Ages (year)</b>	<b>Sample Size</b>	<b>Area(s) Addressed</b>	<b>Outcome</b>
1*	3-21	6	Social, communication, behavior	+

*\*Note:* See peer- and adult-mediated social skills strategies for additional studies on strategies used in the LEAP model as well as ABA strategies.

## STUDIES CITED IN RESEARCH TABLE

1. Strain, P. S., & Hoyson, M. (2000). On the need for longitudinal, intensive social skill intervention: LEAP follow-up outcomes for children with autism as a case-in-point. *Topics in Early Childhood Special Education, 20*, 116-122.  
This 18-year study of six individuals with autism (ages 30 to 53 months at start of study) found that LEAP model use resulted in increases in social skills and appropriate behaviors that were sustained over time.

## REFERENCES

- Cordisco, L., & Strain, P. S. (1986). Assessment of generalization and maintenance in a multicomponent parent training program. *Journal of the Division for Early Childhood, 10*, 10-24.
- Hoyson, M., Jamieson, B., & Strain, P. S. (1984). Individualized group instruction of normally developing and autistic-like children: The LEAP curriculum model. *Journal of the Division for Early Childhood, 8*, 157-172.
- Kohler, F. W., & Strain, P. S. (1997). Combining incidental teaching and peer-mediation with young children with autism. *Journal of Autism and Related Disorders, 12*, 196-206.
- Sainato, D. M., Goldstein, H., & Strain, P. S. (1992). Effects of self-monitoring on preschool children's use of social interaction strategies with their handicapped peers. *Journal of Applied Behavior Analysis, 25*, 127-142.
- Strain, P. S. (1987). Comprehensive evaluation of young autistic children. *Topics in Early Childhood Special Education, 7*, 97-110.
- Strain, P. S. (2001). Empirically-based social skill intervention. *Behavioral Disorders, 27*, 30-36.
- Strain, P., & Hoyson, M. (2000). The need for longitudinal intensive social skill intervention: LEAP follow-up outcomes for children with autism. *Topics in Early Childhood Special Education, 20*, 116-123.

## RESOURCES AND MATERIALS

- Comparison of Two Programs: <http://www.fpg.unc.edu/~asdtc/assets/collateral/teacch-leap.ppt>  
This is a PowerPoint presentation comparing the TEACCH and LEAP programs.
- Introduction to LEAP: <http://www.autism-help.org/intervention-LEAP.htm>  
This links the user to a LEAP fact sheet and is very user-friendly.

## GENERAL RESOURCES

- Autism Internet Modules (AIM) [www.autisminternetmodules.org](http://www.autisminternetmodules.org). The Autism Internet Modules were developed with one aim in mind: to make comprehensive, up-to-date, and usable information on autism accessible and applicable to educators, other professionals, and families who support individuals with autism spectrum disorders (ASD). Written by experts from across the U.S., all online modules are free, and are designed to promote understanding of, respect for, and equality of persons with ASD.
- The Autism Web Course: [http://cdd.unm.edu/swan/autism\\_course/about/index.htm](http://cdd.unm.edu/swan/autism_course/about/index.htm). This web course was developed out of materials from the Interactive Collaborative Autism Network (ICAN). The Autism Programs at the University of New Mexico has updated and added information to this web course.
  - Characteristics
  - Assessment
  - Academic Interventions
  - Behavioral Interventions
  - Communication Interventions
  - Environmental Interventions
  - Social Interventions
  - Family Support Suggestions
- Indiana Resource Center for Autism (IRCA) <http://www.iidc.indiana.edu/irca/fmain1.html>. The Indiana Resource Center for Autism staff's efforts are focused on providing communities, organizations, agencies, and families with the knowledge and skills to support children and adults in typical early intervention, school, community, work, and home settings.
  - IRCA Articles: <http://www.iidc.indiana.edu/index.php?pageId=273>
- Texas Statewide Leadership for Autism [www.txautism.net](http://www.txautism.net). The Texas Statewide Leadership for Autism in conjunction with the network of Texas Education Service center with a grant from the Texas Education Agency has developed a series of free online courses in autism. Please check the training page, [www.txautism.net/training.html](http://www.txautism.net/training.html), for update lists of courses, course numbers and registration information. Current courses include the following:
  - Asperger Syndrome 101
  - Augmentative and Alternative Communication and the Autism Spectrum
  - Autism for the General Education Teacher
  - Autism 101: Top Ten Pieces to the Puzzle
  - Classroom Organization: The Power of Structure for Individuals with ASD
  - Communication: The Power of Communication for Individuals with ASD
  - Futures Planning for Students with Autism Spectrum Disorder
  - Navigating the Social Maze: Supports and Interventions for Individuals with ASD
  - Solving the Behavior Puzzle: Making Connections for Individuals with ASD